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FIG. 1

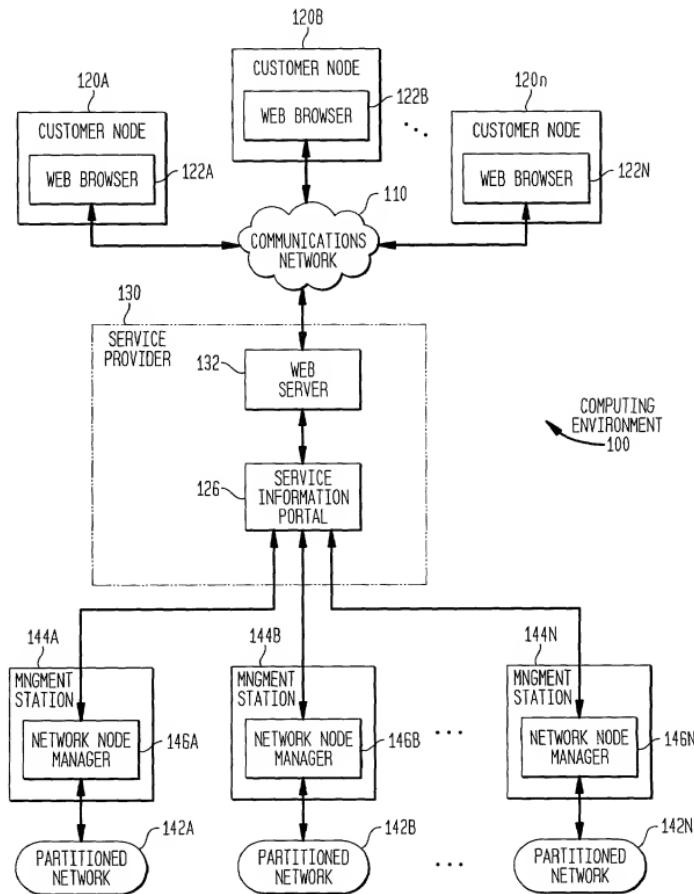


FIG. 2

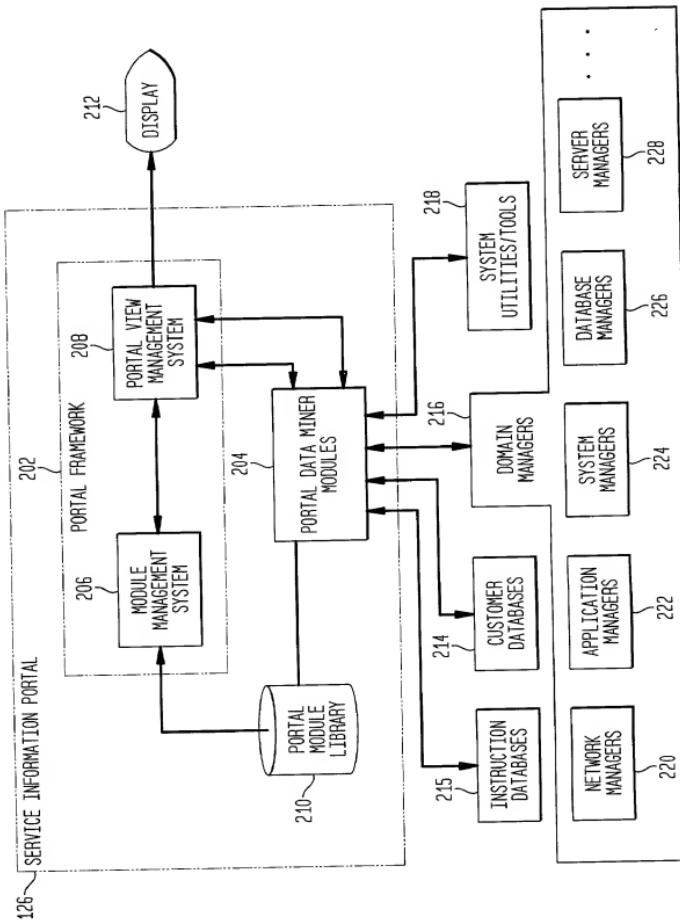


FIG. 3A

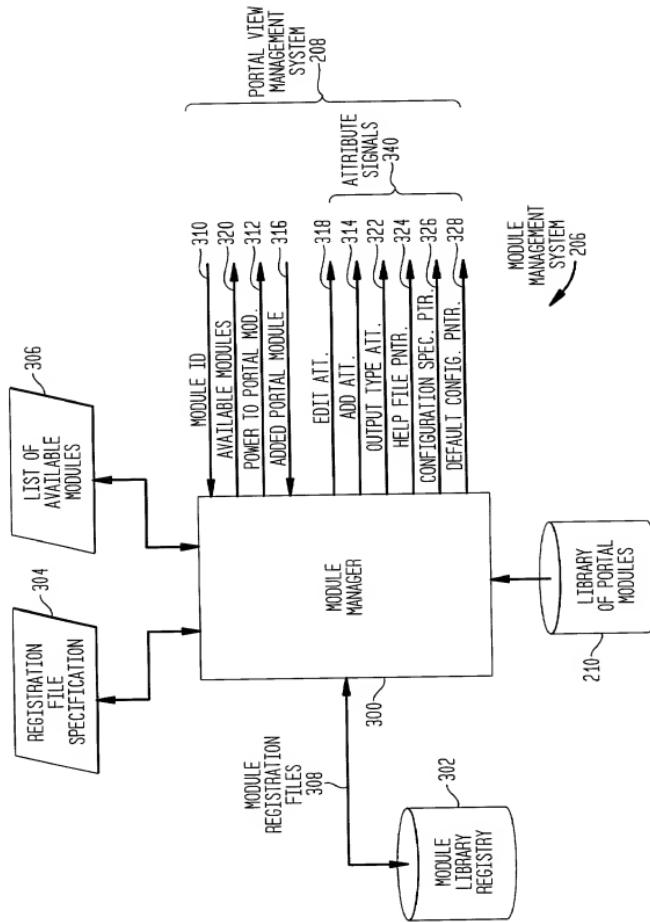


FIG. 3B

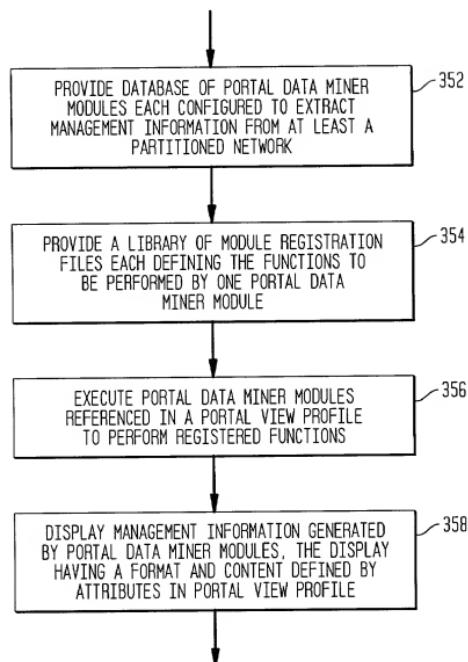


FIG. 4

MODULE REGISTRATION
FILE SPECIFICATION

400

HEADER DATA 402

404

ATTRIBUTE LIST 406

```
1  <!-- OVModuleRegistration.dtd -->
2  <!-- Copyright (c) 2000 Hewlett-Packard
3  Company -->
4  <!-- $Revision: /main/BACCHUS/8 $ -->
5  <!-- $Date: 2001/03/15 00:13 UTC $ -->
6
7  <!ELEMENT ModuleRegistration EMPTY> ~~~~ 404
8
9  <!ATTLIST ModuleRegistration
10    vendorName      CDATA #IMPLIED
11    vendorURL       CDATA #IMPLIED
12    description     CDATA #IMPLIED
13    version         CDATA #IMPLIED
14    category        CDATA "General"
15    title           CDATA #IMPLIED
16    classid         ID #REQUIRED
17    implementation   CDATA #REQUIRED
18    outputType      (narrow|NARROW|wide|WIDE|any|ANY) "narrow"
19    add
20    (1|0|YES|yes|NO|no) "no"
21    edit
22    (1|0|YES|yes|NO|no) "no"
23    help            CDATA #IMPLIED
24    configDTD       CDATA #IMPLIED
25    defaultConfigXML CDATA #IMPLIED>
```

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FIG. 5

NETWORK HEALTH MODULE
REGISTRATION FILE
500



```
1 <?xml version="1.0" standalone="no"?>
2 <!DOCTYPE ModuleRegistration SYSTEM
3 "OVModuleRegistration.dtd">
4 <ModuleRegistration
5   vendorName  ="Hewlett-Packard
6           Company"
7   vendorURL   ="http://www.
8           openview.hp.com"
9   description  ="HP OpenView SIP Network
10          Device Health Module"
11  version     ="2.0"
12  category    ="NNM"
13  title       ="Network Device
14          Health"
15  classid    ="com.hp.ov.portal.
16           modules.health"
17  implementation
18      ="/servlet/com.hp.ov.
19      portal.modules.health.
20      HealthServlet"
21  outputType  ="narrow"
22  add         ="yes"
23  edit        ="yes"
24  help        ="/OvSipDocs/C/help/
25          NNM/healthView.html"
26  configDTD  ="OVNetworkHealth.dtd"
27  defaultConfigXML
28      ="defaults/
29      OVDefaultNetHealth.
30      xml"
31 />
```

FIG. 6

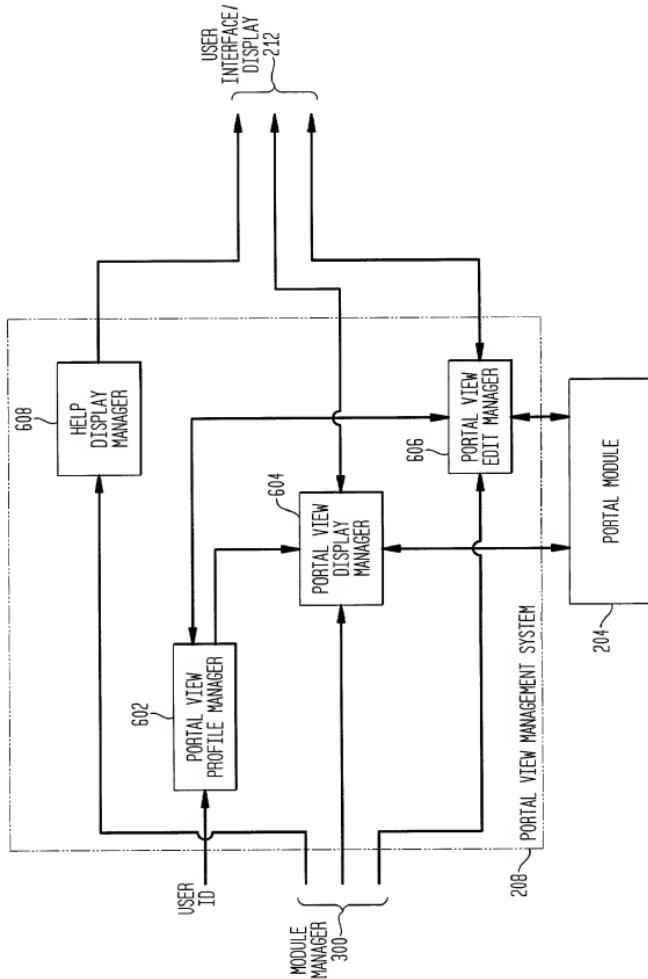


FIG. 7

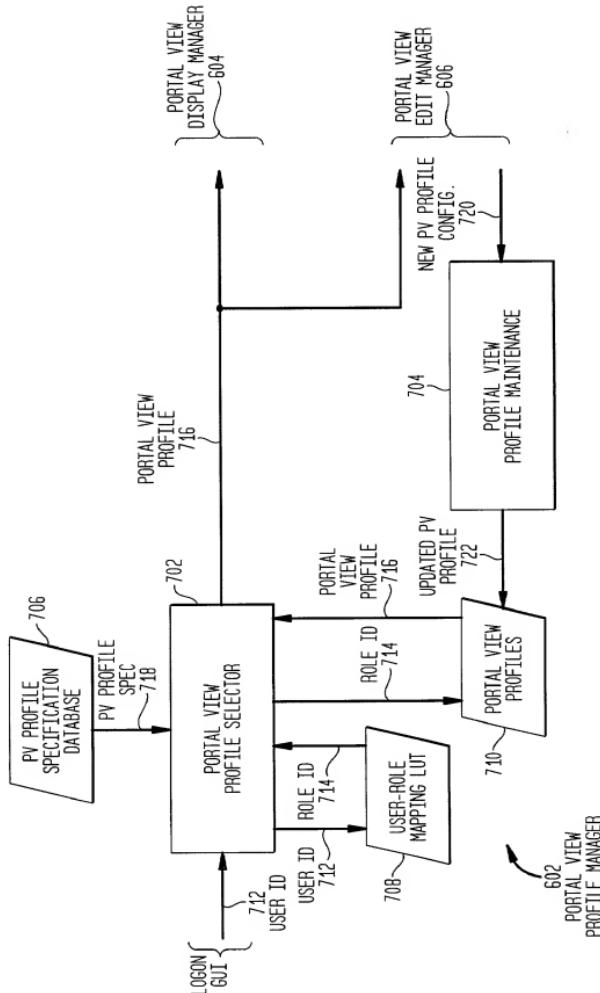
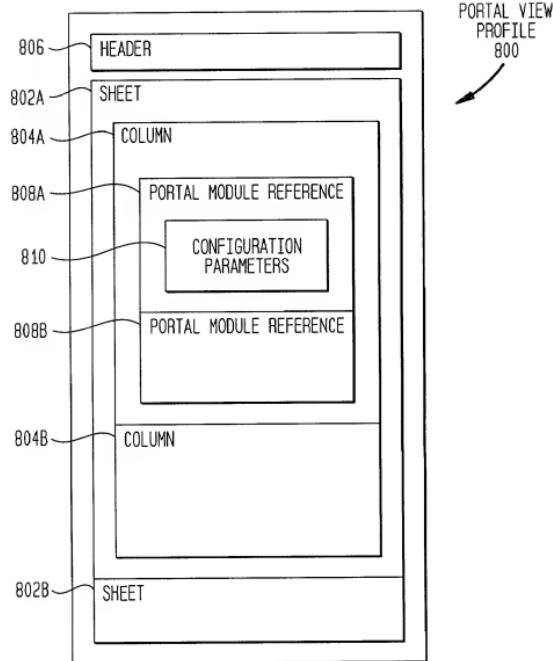


FIG. 8



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FIG. 9

NETWORK HEALTH PORTAL
VIEW PROFILE SPECIFICATION
900

HEADER
902

NETWORK HEALTH ELEMENT SPEC.
904

SUMMARY ELEMENT SPEC.
906

```
1 <!-- OVNetworkHealth.dtd
2 <!-- Copyright (c) 2000 Hewlett-Packard
3 Company
4 <!-- $Revision: /main/BACCHUS/7 $
5 <!-- $Date: 2001/04/11 20:41 UTC $
6 <!---
7 <!ELEMENT NetworkHealth (Summary+)
8 <!ATTLIST NetworkHealth
9   showRawData   (yes|no|YES|NO|1|0) "no"
10  showUnknown   (yes|no|YES|NO|1|0) "no"
11 >
12
13 <!ELEMENT Summary (Component|,
14 |(NodeSelection | InterfaceSelection))
15 <!ATTLIST Summary
16   id          CDATA #REQUIRED
17   title       CDATA #REQUIRED
18   display     (yes|no|YES|NO|1|0) "yes"
19   displayDepth (1|2|3) "3"
20 >
```

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FIG. 10

FIGURE 10A
FIGURE 10B
FIGURE 10C
FIGURE 10D
FIGURE 10E
FIGURE 10F
FIGURE 10G

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FIG. 10A

PORTAL
VIEW PROFILE
1000

HEADER
1002

PORTAL VIEW
WINDOW
ATTRIBUTES
1004

PORTAL MODULE
REFERENCE
1006A

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE PortalView SYSTEM
3   ./PortalView.dtd>
4 <PortalView
5   colorScheme="/OvSipDocs/styles/default.css"
6   defaultSheetID="NetworkSheet"
7   refreshRate="5000" showDateTime="yes"
8   showUserName="yes" userName="Any User">
9     <Sheet id="NetworkSheet" title="Network">
10       <Column width="narrow">
11         <ModuleInstance
12           classid="com.hp.ov.portal.modules.health"
13           display="yes" id="NetworkHealth"
14           rollupState="down">
15           <NetworkHealth showRawData="no"
16           showUnknown="no">
17             <Summary display="no"
18             displayDepth="3" id="InterfaceHealth"
19             title="Interface Health">
20               <Component href="#IfStatus"
21               vital="yes" weight="2"/>
22               <Component href="#IfUtil"
23               vital="no" weight="1"/>
24               <Component href="#IfInErrors"
25               vital="no" weight="1"/>
26               <Component
27               href="#IfOutErrors" vital="no" weight="1"/>
28               <InterfaceSelection
29               id="AllInterfaces" op="AND" title="All
30               Interfaces"/>
31             </Summary>
```

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FIG. 10B

PORTAL
VIEW PROFILE
1000

PORTAL MODULE
REFERENCE
1006A (CONT)

```
32 <Summary display="yes"  
33 displayDepth="3" id="RouterHealth"  
34 title="Router Health">  
35 <Component href="#IfHealth"  
36 vital="no" weight="1"/>  
37 <Component  
38 href="#CiscoCpuUtil" vital="no" weight="1"/>  
39 <NodeSelection id="Routers"  
40 op="AND" title="Routers">  
41 <CapabilityFilter op="OR">  
42 <Capability  
43 field="isRouter" value="true"/>  
44 </CapabilityFilter>  
45 </NodeSelection>  
46 </Summary>  
47 <Summary display="no"  
48 displayDepth="3" id="KeyDeviceHealth"  
49 title="Key Device Health">  
50 <Component href="#IfHealth"  
51 vital="no" weight="1"/>  
52 <NodeSelection  
53 id="KeyDevices" op="AND" title="Key Devices">  
54 <CapabilityFilter op="OR">  
55 <Capability  
56 field="isKeyDevice" value="true"/>  
57 </CapabilityFilter>  
58 </NodeSelection>  
59 </Summary>
```

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FIG. 10C

PORTAL
VIEW PROFILE
1000

PORTAL MODULE
REFERENCE
1006A (CONT)

```
60             <Summary display="no"
61:displayDepth="3" id="CPEHealth" title="CPE
62:Health">
63:           <Component href="#IfHealth"
64:vital="no" weight="1"/>
65:           <NodeSelection id="CPE"
66:op="AND" title="Customer Premise Equipment">
67:           <CapabilityFilter op="OR">
68:           <Capability
69:field="isCPE" value="true"/>
70:           </CapabilityFilter>
71:           <NodeSelection>
72:           </Summary>
73:           <Summary display="no"
74:displayDepth="3" id="ServerHealth"
75:title="Server Health">
76:           <Component href="#IfHealth"
77:vital="no" weight="1"/>
78:           <NodeSelection id="Servers"
79:op="AND" title="Servers">
80:           <CapabilityFilter op="OR">
81:           <Capability
82:field="isServer" value="true"/>
83:           </CapabilityFilter>
84:           <NodeSelection>
85:           </Summary>
86:           </NetworkHealth>
87:       </ModuleInstance>
```

FIG. 10D

PORTAL
VIEW PROFILE
1000

PORTAL MODULE
REFERENCE
1006B

VIEW WINDOW
ATTRIBUTES
1004

PORTAL MODULE
REFERENCE
1006C

```
88     <ModuleInstance  
89     classid="com.hp.ov.portal.modules.bookmarks"  
90     display="yes" id="BookmarksModule"  
91     rollupState="down">  
92         <Bookmarks>  
93             <Entry href="http://www.hp.com"  
94             target="bookmarkwin" title="HP Primary Site"/>  
95             <Entry  
96             href="http://www.openview.hp.com"  
97             target="bookmarkwin" title="HP OpenView Site"/>  
98         </Bookmarks>  
99     </ModuleInstance>  
100    </Column>  
101    <Column width="wide">  
102        <ModuleInstance  
103        classid="com.hp.ov.portal.modules.topomap"  
104        display="yes" id="Topology" rollupState="down">  
105            <TopologyMap drillDown="no"  
106            showStatus="yes">  
107                <Submap  
108                href="ovw://hpcndta/default/Internet"/>  
109            </TopologyMap>  
110        </ModuleInstance>
```

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FIG. 10E

PORTAL
VIEW PROFILE
1000

PORTAL MODULE
REFERENCE
1006D

VIEW WINDOW
ATTRIBUTES
1004

PORTAL MODULE
REFERENCE
1006E

```
111 <ModuleInstance  
112 classid="com.hp.ov.portal.modules.alarms"  
113 display="yes" id="Alarm" rollupState="down">  
114 <AlarmDisplay>  
115 <CategoryDefName  
116 href="ErrorAlarms.xml"/>  
117 <CategoryDefName  
118 href="ThresholdAlarms.xml"/>  
119 <CategoryDefName  
120 href="StatusAlarms.xml"/>  
121 <CategoryDefName  
122 href="ConfigurationAlarms.xml"/>  
123 <CategoryDefName  
124 href="ApplicationAlertAlarms.xml"/>  
125 <CategoryDefName  
126 href="AllAlarms.xml"/>  
127 </AlarmDisplay>  
128 </ModuleInstance>  
129 </Column>  
130 </Sheet>  
131 <Sheet id="ServicesSheet" title="Services">  
132 <Column width="narrow">  
133 <ModuleInstance  
134 classid="com.hp.ov.portal.modules.service.SvcCa  
135 rdServlet" display="yes"  
136 help="/OvSipDocs/C/help/VPNavigator/cardView.ht  
137 ml" id="module10" rollupState="down"  
138 title="Service Cards">  
139 <ServiceCard details="no"  
140 server=""/>  
141 </ModuleInstance>
```

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FIG. 10F

PORTAL
VIEW PROFILE
1000

PORTAL MODULE
REFERENCE
1006F

VIEW WINDOW
ATTRIBUTES
1004

PORTAL
MODULE
1006G

```
142 <ModuleInstance  
143 classid="com.hp.ov.portal.modules.service.SvcHe  
144 althServlet" display="yes"  
145 help="/OvSipDocs/C/help/VPNavigator/healthView.  
146 html" id="module11" rollupState="down"  
147 title="Service Health">  
148 <ServiceHealth details="no"  
149 server="">  
150 <ServiceSummary critical="no"  
151 id="normal" inverse="no" major="no" minor="no"  
152 normal="yes" recursive="yes" scoreName="Normal"  
153 title="Normal Services" warning="no"/>  
154 <ServiceSummary critical="yes"  
155 id="critical" inverse="yes" major="no"  
156 minor="no" normal="no" recursive="yes"  
157 scoreName="Critical" title="Critical Services"  
158 warning="no"/>  
159 <ServiceSummary critical="yes"  
160 id="abnormal" inverse="yes" major="yes"  
161 minor="yes" normal="no" recursive="yes"  
162 scoreName="Abnormal" title="Abnormal Services"  
163 warning="yes"/>  
164 </ServiceHealth>  
165 </ModuleInstance>  
166 </Column>  
167 <Column width="wide">  
168 <ModuleInstance  
169 classid="com.hp.ov.portal.modules.service.SvcLi  
170 stServlet" display="yes"  
171 help="/OvSipDocs/C/help/VPNavigator/browserView.  
172 html" id="module7" rollupState="down"  
173 title="Service Browser">  
174 <ServiceBrowser details="no"  
175 server="">  
176 </ModuleInstance>
```

FIG. 10G

PORTAL
VIEW PROFILE
1000

PORTAL MODULE
REFERENCE
1006H

VIEW WINDOW
ATTRIBUTES
1004

```
177 <ModuleInstance  
178 classid="com.hp.ov.portal.modules.service.SvcGr  
179 aphServlet" display="yes"  
180 help="/OVSipDocs/C/help/VPNavigator/graphView.h  
181 tml" id="module8" rollupState="down"  
182 title="Service Graph">  
183 <ServiceGraph server="" />  
184 </ModuleInstance>  
185 </Column>  
186 </Sheet>  
187 </PortalView>
```

FIG. 11

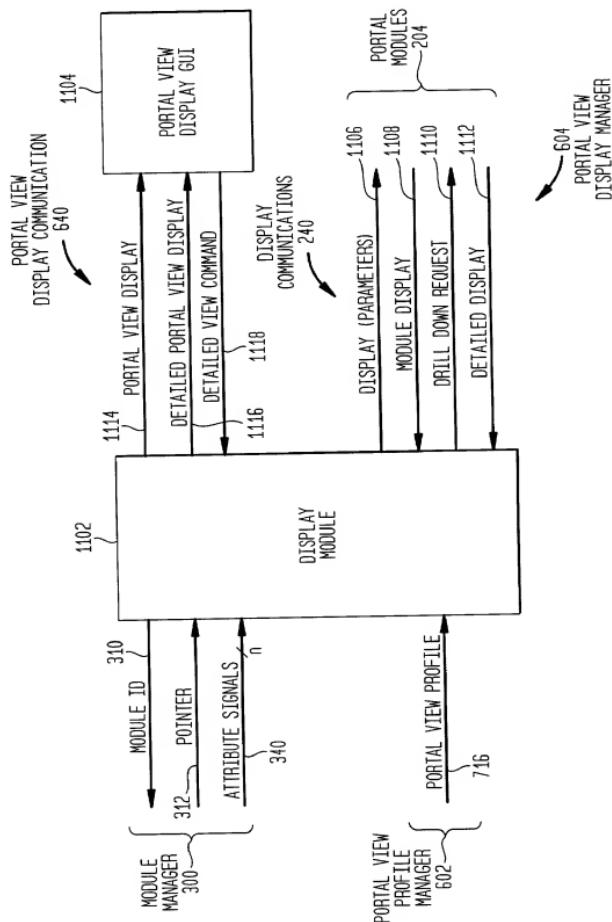
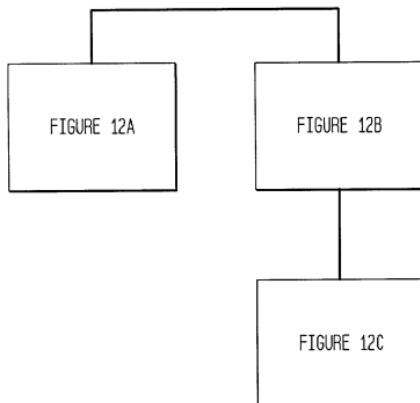
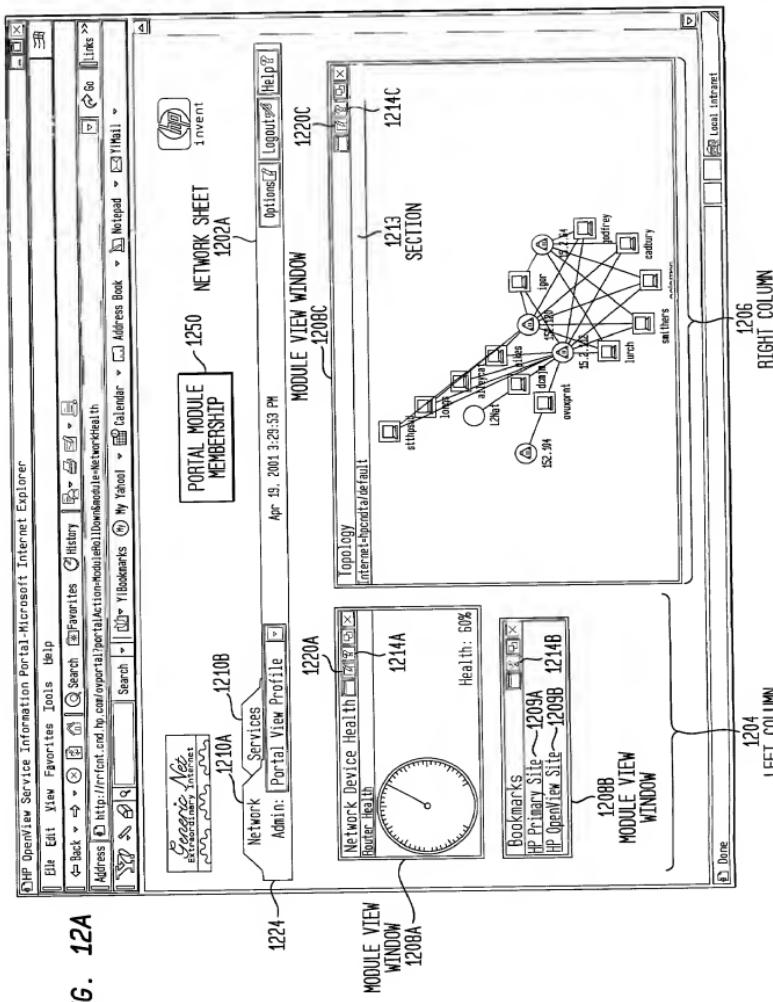


FIG. 12



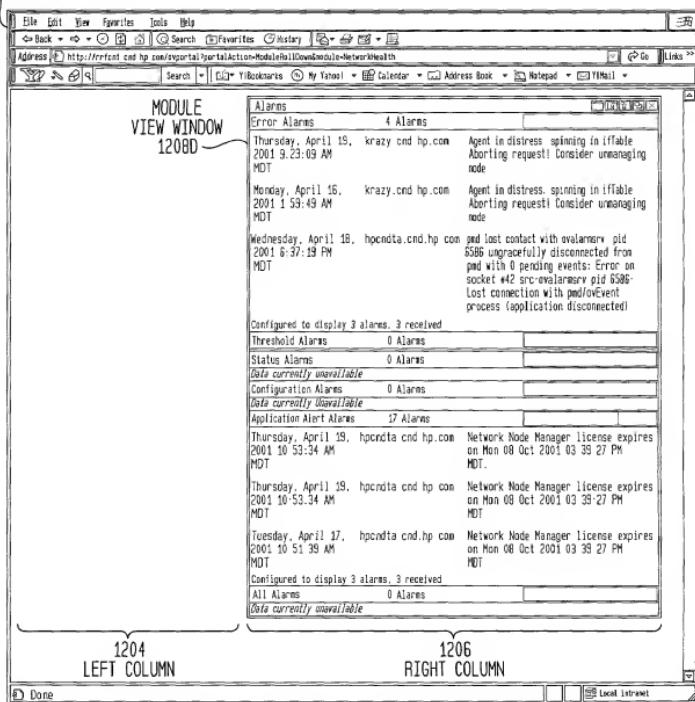
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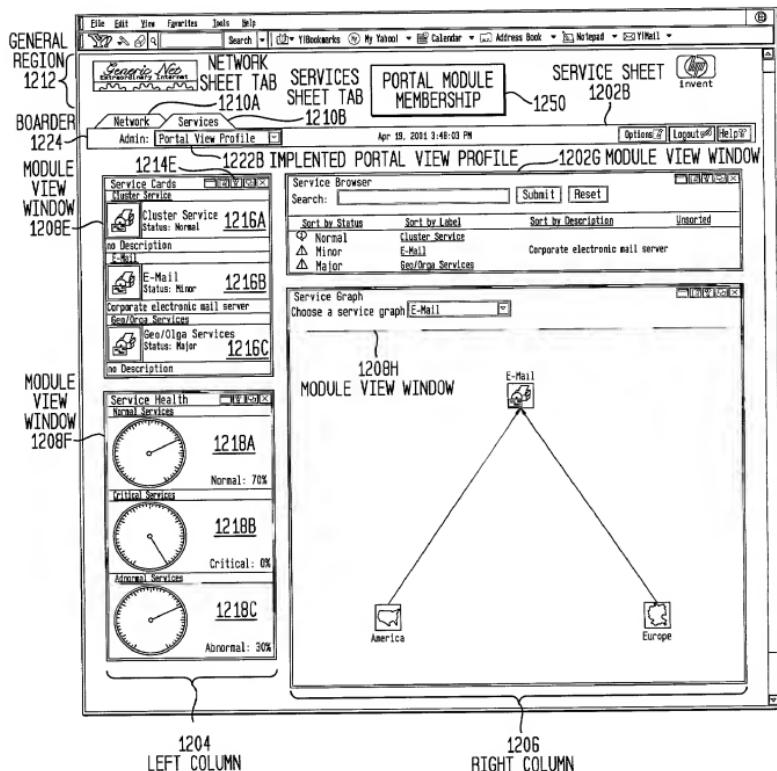
NETWORK
SHEET
(CONT)
1202A

FIG. 12B



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FIG. 12C



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FIG. 13

HP OpenView Service Information Portal-Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://rfcmt.cnd.hp.com/exporta?&action=ModuleSpecificModule=NetworkHealth&action=DrillDownHealth#id=RouterHealth

Generic Neo Inventor

ROUTER HEALTH DETAILED PORTAL VIEW 1300

Admin Apr 20, 2001 11:28 AM Home Help

Network Device Health Router Health

Resource	Overall Health	Interface Health	CPU Utilization Health
coleman.cnd.hp.com	⊕ 33%	⊕ 33%	<input type="radio"/> Data unavailable
stthpsvl.cnd.hp.com	⊕ 40%	⊕ 40%	<input type="radio"/> Data unavailable
pikes.cnd.hp.com	⊕ 40%	⊕ 40%	<input type="radio"/> Data unavailable
hpfcmjn.cnd.hp.com	⊕ 50%	⊕ 50%	<input type="radio"/> Data unavailable
avvxpnt.cnd.hp.com	⊕ 50%	⊕ 50%	<input type="radio"/> Data unavailable
lurch.cnd.hp.com	⊕ 60%	⊕ 60%	<input type="radio"/> Data unavailable
cadbury.cnd.hp.com	⊕ 60%	⊕ 60%	<input type="radio"/> Data unavailable
igor.cnd.hp.com	⊕ 60%	⊕ 60%	<input type="radio"/> Data unavailable
lobgs.cnd.hp.com	⊕ 66%	⊕ 66%	<input type="radio"/> Data unavailable
alleycat.cnd.hp.com	⊕ 66%	⊕ 66%	<input type="radio"/> Data unavailable
smithers.cnd.hp.com	⊕ 100%	⊕ 100%	<input type="radio"/> Data unavailable
godfrey.cnd.hp.com	⊕ 100%	⊕ 100%	<input type="radio"/> Data unavailable

DONE Local Intranet

FIG. 14

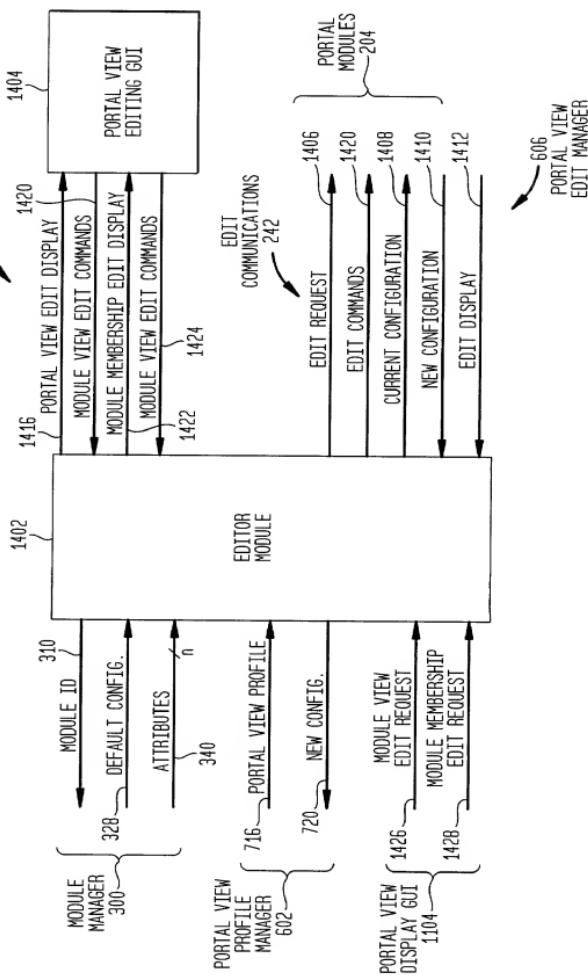
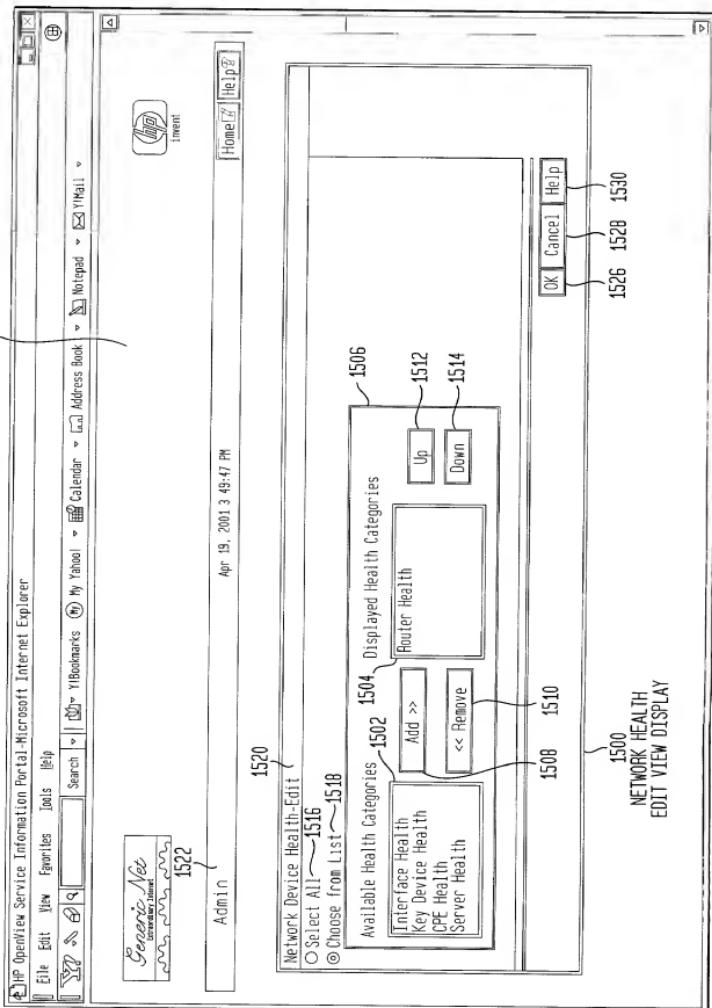


FIG. 15 1524



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FIG. 16

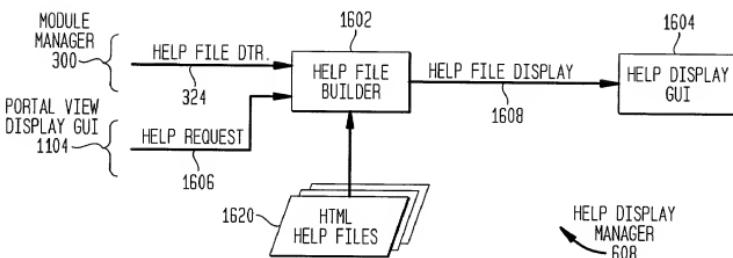


FIG. 17

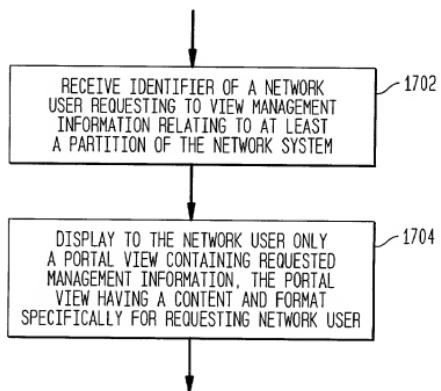
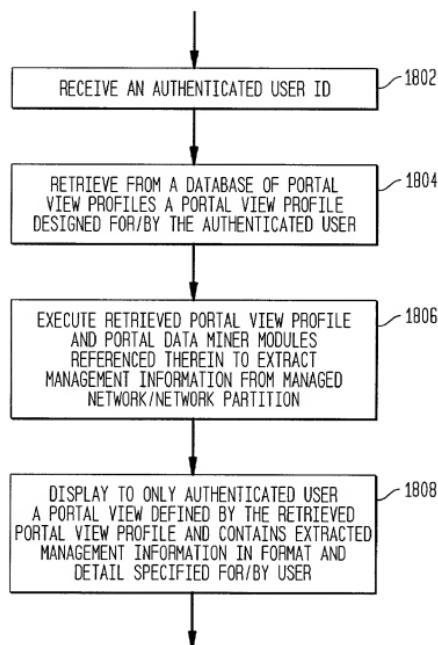


FIG. 18



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FIG. 19

